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By JKeyes at 1:56 pm, Mar 09, 2016



APPROVED

Chief 30 State #1

WORK PLAN

Release Date: 9/24/2015

UL/M Sec 30, T20 south, R35 east, Lea County NM

API # 30-025-40406

February 5, 2016

Prepared by:

Michael Burton

Environmental Department

Diversified Field Service, Inc.

206 West Snyder

Hobbs, NM 88240

Phone: (575)964-8394

Fax: (575)393-8396

Kellie Jones
Environmental Specialist
NM Oil Conservation District-Division 2
Hobbs, NM 88240

RE: Cimarex, Chief 30 State #1 – Remediation Work Plan
UL/M, Section 30, T20S, R35E
API No. 30-025-40406

Ms. Jones,

Cimarex has retained Diversified Field Service, Inc. (DFSI) to address environmental issues for the site detailed herein.

The site is located west of Hobbs, NM, in Lea County. The leak occurred on 9/24/2015. The leak site resulted from an over-pressured poly flowline, due to the line plugging up coming from the well. Approximately 65 bbls of produced water was released, with 40 bbls recovered by a vacuum truck. The spill affected the location pad and ran into the pasture area. A C-141 was drafted on 9/25/15.

Site Assessment and Delineation

On January 28, 2016, DFSI personnel delineated 3 sample points of the leak area. Each sample was tested for chloride levels as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). Auger refusal was attained at 1' and at surface for the sample points. In order to fully delineate, DFSI then drilled a bore hole at SP2 to obtain clean samples. The results are attached. Clean samples were taken to a commercial laboratory for confirmation.

DFSI has conducted a groundwater study of the area and has determined that according to the New Mexico Office of the State Engineer, there are no records of groundwater. Therefore, no eminent danger of groundwater impact or threat to life is anticipated.

Conclusion

After careful review DFSI on behalf of Cimarex would like to propose the following:

Remove 6" BGS of contaminated soil on the pad, then backfill with fresh caliche. In the pasture area, remove 3' BGS and backfill with native topsoil. The pasture area will also be seeded with a BLM, NMOCD approved seed mixture. All contaminated material will be hauled to an approved NM state disposal.

Following the approval of the above plan, DFSI will submit all proper closure documentation to the NMOCD and BLM in accordance to the State and Federal Guidelines set forth.

Please feel free to contact me with any questions concerning this remediation plan request.

Sincerely,



Michael Burton
Environmental Operations Director
Diversified Field Service, Inc.
206 West Snyder
Hobbs, NM 88240
Office: (575)964-8394
Mobile: (575)390-5454
Fax: (575)964-8396
Email: Mburton@diversifiedfsi.com

cc

Attachments: Initial Form C-141
Site/Sample Map
Sample Data
Lab Data
Photo Page



Chief 30 State #1

PHOTO PAGE



Hand-augering for soil samples



Using drill to obtain confirmation samples



Using drill to obtain confirmation samples



Plugging drilling hole with bentonite

Site Diagram

Cimarex, Chief 30 State #1
UL/M, Sec. 30 T20S R35E
Lea County, NM
Drafted By: Lance Crenshaw, 10/2/2015

0 0.005 0.01 0.02 Miles

Legend

Misc_points

Types

- ⚡ Electrical Box
- ⚡ Power Pole
- ◆ Headers
- Injection
- ⬡ Pumpjacks
- Tanks
- Valves
- ⬡ Other
- ⊕ Soil Bores
- ▲ sample_pts
- ★ Source

Pipeline

Type

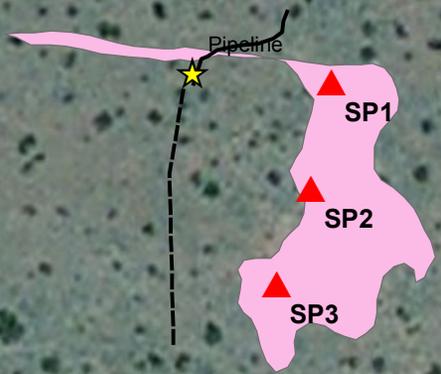
- Above Ground Line
- - - Buried Line

Spill

- <all other values>

Spill_Media

- Oil and Produced H2O
- Oil
- Other
- Produced Water



Spill Area:
4,968 sq. ft.

Lance Crenshaw
GIS Technician

Soil Remediation and Ground Water Remediation
Environmental Assessments
Regulatory Compliance

Environmental DFSI Services

Office: 575-964-8394
Fax: 575-964-8396
Cell: 575-441-2359
Email: lcrenshaw@diversifiedfsi.com

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USD swisstopo, and the GIS User Community



February 05, 2016

JAIME CASTILLO

CIMAREX ENERGY CO.-MIDLAND

600 N. MARIENFELD ST, SUITE 600

MIDLAND, TX 79701

RE: CHIEF 30 STATE #1

Enclosed are the results of analyses for samples received by the laboratory on 01/28/16 14:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" and "K".

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 CIMAREX ENERGY CO.-MIDLAND
 JAIME CASTILLO
 600 N. MARIENFELD ST, SUITE 600
 MIDLAND TX, 79701
 Fax To: UNK-NOWN

Received:	01/28/2016	Sampling Date:	01/28/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	CHIEF 30 STATE #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SAMPLE POINT 2 @ 4' (H600212-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2016	ND	2.15	107	2.00	4.06	
Toluene*	<0.050	0.050	02/04/2016	ND	2.12	106	2.00	3.54	
Ethylbenzene*	<0.050	0.050	02/04/2016	ND	1.94	96.8	2.00	2.54	
Total Xylenes*	<0.150	0.150	02/04/2016	ND	5.82	96.9	6.00	2.65	
Total BTEX	<0.300	0.300	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	01/29/2016	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/01/2016	ND	210	105	200	3.07	
DRO >C10-C28	<10.0	10.0	02/01/2016	ND	205	102	200	6.30	

Surrogate: 1-Chlorooctane 71.2 % 35-147
Surrogate: 1-Chlorooctadecane 74.1 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 CIMAREX ENERGY CO.-MIDLAND
 JAIME CASTILLO
 600 N. MARIENFELD ST, SUITE 600
 MIDLAND TX, 79701
 Fax To: UNK-NOWN

Received:	01/28/2016	Sampling Date:	01/28/2016
Reported:	02/05/2016	Sampling Type:	Soil
Project Name:	CHIEF 30 STATE #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SAMPLE POINT 2 @ 5' (H600212-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/04/2016	ND	2.15	107	2.00	4.06	
Toluene*	<0.050	0.050	02/04/2016	ND	2.12	106	2.00	3.54	
Ethylbenzene*	<0.050	0.050	02/04/2016	ND	1.94	96.8	2.00	2.54	
Total Xylenes*	<0.150	0.150	02/04/2016	ND	5.82	96.9	6.00	2.65	
Total BTEX	<0.300	0.300	02/04/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	01/29/2016	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/01/2016	ND	210	105	200	3.07	
DRO >C10-C28	13.3	10.0	02/01/2016	ND	205	102	200	6.30	

Surrogate: 1-Chlorooctane 75.3 % 35-147

Surrogate: 1-Chlorooctadecane 77.3 % 28-171

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No records found.

Basin/County Search:

County: Lea

PLSS Search:

Section(s): 30, 31, 29, 32 **Township:** 20S **Range:** 35E

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company Cimarex Energy	Contact Christine Alderman
Address 600 N Marienfeld Ste 600 Midland TX	Telephone No. 432-853-7059
Facility Name Chief 30 State #1	Facility Type Production

Surface Owner	Mineral Owner	API No. 30-025-40406
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	30	20S	35E	660	S	330	W	Lea

Latitude 32.538753 Longitude -103.504077

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 65 bbls	Volume Recovered 40 bbls
Source of Release poly flowline	Date and Hour of Occurrence 09/24/15	Date and Hour of Discovery 09/24/15
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Kellie Jones	
By Whom? Christine Alderman	Date and Hour 9/25/15 10:30 am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
A poly flowline over pressured due to the line plugging up coming from the well.

Describe Area Affected and Cleanup Action Taken.*
location pad and grazing land were impacted.
Our consultant will assess and delineate. A work plan will be developed and submitted.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Christine Alderman</i>	OIL CONSERVATION DIVISION	
Printed Name: Christine Alderman	Approved by Environmental Specialist:	
Title: ESH Supervisor	Approval Date:	Expiration Date:
E-mail Address: calderman@cimarex.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 9/25/15 Phone: 432-853-7059		

* Attach Additional Sheets If Necessary